

**Remarks**

Applicant thanks Examiner Nguyen again for the patient and careful examination of this application and the clear explanation of the claim rejections; and for conditionally allowing claim 16. Responsive to the Office Action of January 27, 2006, and the claim rejections, applicant respectfully replies as follows:

**Claim 1**

Claim 1 stands rejected as being unpatentable over Kraus et al. (US Patent 4,803,595) in view of Hayashi et al. (US Pat. 6,809,268).

Claim 1 describes a semiconductor device that comprises three elements:

- a) a plurality of spaced-apart substrate segments;
- b) an integrated circuit chip mounted on one of said segments; and
- c) a flexible interconnection layer supporting said substrate segments.

The Office action agrees that Kraus does not disclose the interconnection layer is a flexible interconnection layer; but argues that Hayashi cures this deficiency. In addition, the Office Action argues that there is evidence that Hayashi provides motivation "to modifying the semiconductor package of Kraus et al. by having the flexible interconnection layer because as taught by Hayashi et al. such flexible interconnection layer would provide no cracks generated in a portion of the core substrate." The cited section is copied below and it is clear that the reason for "no cracks" is not what is stated in the Office Action:

Since the core substrate, in which an electronic component is embedded, contains a reinforcing inorganic filler, no cracks are generated in a portion of the core substrate around the electronic component.<sup>1</sup>

It could not be clearer from reading this section of the Hayashi patent that "a reinforcing inorganic filler" is the reason for the "no cracks" property of the core substrate; and it is well known in the art that a reinforcing inorganic filler makes the interconnection

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<sup>1</sup> US 6,809,268 B2, col. 2, ll. 30-33.

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layer less flexible. Therefore, Hayashi does not provide a nexus between the flexibility of the interconnection layer and its no-crack property.

Applicant respectfully submits that because there is no evidence of motivation to combine the disclosure in the Kraus reference with a flexible connection layer disclosed in the Hayashi reference, the Office Action fails to establish a prima facie case of obviousness against claim 1, and therefore claim 1 stands patentable over the cited references.

#### Claim 12

Claim 12 stands rejected on exactly the same ground as claim 1 over Kraus in view of Hayashi.

Claim 12 has the similar element of a flexible interconnection layer as in claim 1. For the same reason explained above related to claim 1, the 103 rejection against claim 12 is also improper because there is no evidence in the Office Action that can support a motivation to combine the disclosure in the Kraus patent with the flexible printed wiring substrate disclosed in the Hayashi patent. Applicant respectfully submits that claim 12 must stand patentable over the cited references.

#### Claims 2-9, and 11

Claims 2-9, and 11 properly depend from claim 1. Because claim 1 stands patentable, claims 2, 3, 5-9, and 11 stand patentable, at least by virtue of their dependence.

#### Claims 13-15

Claims 13-15 properly depend from claim 12. Because claim 12 stands patentable, claims 13-16 stand patentable, at least by virtue of their dependence.

In summary, applicant respectfully submits that this application is in allowable form and all pending claims distinguish over the cited references and stands patentable.

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Applicant respectfully requests further examination of this application and timely allowance of all pending claims.

Respectfully submitted,

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